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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/771,087	02/03/2004	Frederick B. Growcock	2223-04501	1953

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EXAMINER

TUCKER, PHILIP C

ART UNIT PAPER NUMBER

1712

DATE MAILED: 01/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/771,087	Applicant(s) GROWCOCK ET AL.	
	Examiner Philip C. Tucker	Art Unit 1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3-32 and 34-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Brookey (6148917).

Brookey teaches a well servicing fluid which comprises an oleaginous continuous phase, aphrons and a surfactant, and which comprise the aphrons at levels within the present claimed levels (see examples 5-7, Table A and column 4, lines 38-51). Various viscosifiers can be added to the fluid (column 6, line 6 to column 7, line 5). The fluids would inherently have the same half-life and pressure stability as in the present invention.

3. Claims 1, 3-32 and 34-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Brookey (6156708).

Brookey teaches a well fluid which comprises an oleaginous continuous phase (see column 3, lines 27-33), aphrons and surfactants (column 7, lines 1-43), and which

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comprise the aphrons at levels within the scope of the present invention (see column 9, lines 4-6). Water may be emulsified therein (column 8, lines 41-55). Various viscosifiers may be used (column 3, line 34- column 6, line 67). The fluids would inherently have the same half-life and pressure stability as in the present invention.

4. Claims 1, 3-32 and 34-39 are rejected under 35 U.S.C. 102(e) as being anticipated by Morgan (6649571).

Morgan teaches a well fluid which comprises an oleaginous continuous phase (see column 2, lines 1-7), aphrons and silicone surfactants (see abstract) and other surfactants (column 7, line 66 – column 8, line 43), and which comprise the aphrons at levels within the scope of the present invention (see column 3, lines 3-5). Water may be emulsified therein (column 8, lines 43-49 and Example 1). Various viscosifiers may be used (column 4, line 32- column 7, line 65). The fluids would inherently have the same half-life and pressure stability as in the present invention.

Claims 1, 6, 8-11, 15-17, 20-32 and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Brookey (US 2003/0201103).

Brookey teaches a well treatment fluid which comprises aphrons, and can have a continuous oleaginous phase (see paragraph 0027), and which may further comprise water (see claim 78). Brookey teaches that a surfactant is used to stabilize the aphrons (paragraph 0023), and a preferred dilatant is polyvinyl alcohol (paragraph 0036). Viscosifiers, such as polymers and clays may be added to the fluid to stabilize the

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aphrons (see paragraphs 0024 and 0033). The viscosity overlaps in scope with claims 16 and 17. The level of polyvinyl alcohol, of from 20 to 500 ppb would clearly lead to half-life and pressure resistant values within the scope of the present invention.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3 and 6-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brookey (US 2003/0201103).

Brookey teaches a well treatment fluid which comprises aphrons, and can have a continuous oleaginous phase (see paragraph 0027), and which may further comprise water (see claim 78). Brookey teaches that a preferred surfactant is an alkyl ether sulfate (paragraph 0023), and a preferred dilatant is polyvinyl alcohol (paragraph 0036). Viscosifiers, such as polymers and clays may be added to the fluid to stabilize the aphrons (see paragraphs 0024 and 0033). The viscosity of above 40,000 centipoise would overlap in scope with claims 16 and 17, and render the viscosity of claims 18 and 19 obvious to one of ordinary skill in the art. Brookey differs from the present invention in that an example with the specific combination of alkyl ether sulfate and polyvinyl alcohol is not disclosed. It would however be obvious to one of ordinary skill in the art

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to utilize alkyl ether sulfate as the surfactant, and polyvinyl alcohol as the dilatant in the fluid of Brookey, given the teaching of Brookey that they are preferred for such purposes. The level of polyvinyl alcohol, of from 20 to 500 ppb would clearly lead to half-life and pressure resistant values within the scope of the present invention.

The utility of fluids within the scope of 7, and clays such as bentonite of claim 12, are notoriously well known in well fluids, and would be obvious to one of ordinary skill in the art over the teaching of oleaginous fluids, and clays by Brookey. With respect to claim 13 and 35, the variation of the amount of water in order to obtain optimum performance of the well fluid would be an obvious variation to one of ordinary skill in the art. Furthermore, no level or type of viscosifier is taught, so as to ascertain the level of water being claimed.

7. Applicants amendment and arguments have been considered but are not deemed persuasive. Applicant has argued with the finding of inherency, in the prior art rejections. Applicant has not shown or given any evidence that the fluids of the applied prior art do not have the half-life claimed, especially for the short period of 5 hours being claimed in claim 1 (Ex parte Gray 10 USPQ2d 1922). The references all teach the use of surfactants and viscosifiers which prolong the life of the aphrons. It is clear from the references that the fluids taught therein would have stability within the scope of the present invention, from the use of the surfactants and viscosifiers therein. In particular, an increase in viscosity is well known in the art to increase the life of the

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aphrons (see for example Morgan at column 4, lines 19-37). As all elements are present to have a long half-life a

With respect to claims 35-39, nothing in the claims preclude a viscosifier from also acting as an aphron stabilizer.

Claims 14 and 36 claim a synergistic effect, but do not teach the effect or the magnitude of the effect, and thus cannot be seen as distinguishing.

A new rejection is presented over Brookey.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip C. Tucker whose telephone number is 571-272-1095. The examiner can normally be reached on Monday - Friday, Flexible schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read 'Philip C. Tucker', with a long horizontal flourish extending to the right.

Philip C Tucker
Primary Examiner
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PCT-3924